Cochise County Report for the 2005 Youth Risk Behavior Survey

by

Yue Qiu, MPH Office of Chronic Disease Prevention & Nutrition Services Public Health Prevention Services Arizona Department of Health Services

Acknowledgements

This report was produced with the support and input from the following organizations and individuals: Arizona Department of Health Services (Frances Kaplan, M. Magda Ciocazan, Ross Merritt, Thelma Carrillo, Christine Pierce) and University of Arizona (Steps Evaluation Team). Thanks to Arizona Department of Education (Mary Szafranski, Lynn Ladd) for the support to produce the report. Thanks to all the schools that participated in the YRBS survey. Many other individuals contributed to the effort of collecting the data that went into this report. We thank all who were involved in the project.

Suggested citation:

Arizona Department of Health Services. *Cochise County Report for the 2005 Youth Risk Behavior Survey*. Steps to a Healthier Arizona Initiative, Arizona Department of Health Services, Public Health Prevention Services, August 2006.

Executive Summaryi
Introduction1
Methodology2
Section 1: Tobacco Use
Section 2: Healthy Eating and Physical Activity7
Section 3: Overweight and Weight Control14
Section 4: Asthma20
Section 5: Diabetes24
Limitations26
Appendix A: The 2005 Arizona Youth Risk Behavior Survey Questionnaire
Appendix B: The 2005 Arizona Youth Risk Behavior Survey Highlights — Cochise
Appendix C: The 2005 Arizona Youth Risk Behavior Survey Highlights — Arizona

The Youth Risk Behavior Survey (YRBS) was designed to provide the estimates to measure risk behaviors and self-reported health status among students. The 2005 YRBS was conducted among high school students in Cochise County. It helps shed the light for setting the priority to reduce risk behaviors and promote health among high school students in the community.

This report provides the estimates of the prevalence of risk behaviors and health status among Cochise high school students. It uses 2005 YRBS data to examine whether there were differences in risk behaviors and health status among high school students in Arizona and Cochise. It also presents those estimates by gender, age group, grade, and race/ethnicity and compares the difference across the groups for Cochise County.

Key Findings

- About 64 percent of Cochise high school students have tried smoking. One in five Cochise high school students smoked before 13 years old and one in four smoked during the past month. Although more than half of high school student smokers tried to quit, the prevalence of tobacco use increased among older students. The results suggest a continuing intervention need to target high school students in preventing them from smoking, particularly early initiation of tobacco use among adolescents. It is also essential to reduce students' access to tobacco products and reduce their exposure to environmental tobaccos smoke. Given evidence of students' intention to quit smoking yet increasing tobacco use among older students, it remains a clear need to help them win the battle through effective smoke cessation programs.
- Among Cochise high school students, less than one fifth ate five or more servings of fruits and vegetables and one in three did not meet CDC recommendation of sufficient physical activity. Only 23 percent of Cochise high school students had three or more dairy products daily. Only one in three students ate breakfast daily. More than one in five students ate baked food, drank regular soda, and had sugared beverages daily. In addition, about 10 percent of students ate fast food daily. About 40 percent of Cochise high school students watched three or more hours of TV per day. These findings reveal the unhealthy eating behaviors and sedentary life style among Cochise students. Efforts should be focused on preventing chronic diseases associated with diet, exercise and weight, strengthening the link between nutrition and physical activity in health promotion, improving health education and accessibility of healthy foods in a variety of settings. Integration of school program, family and community involvement is essential to promote healthy life style among students.
- One fourth of Cochise high school students were overweight or at risk of becoming overweight. Two percent of high school students were informed by a doctor or nurse that they have diabetes. About half of students tried to lose weight through eating less or exercise. One third of students tried to vomit or took laxatives and some tried more than 24 hours of fasting or took diet pills to lose weight. These findings emphasize the need to promote a healthy lifestyle to prevent obesity and its related chronic diseases among students. It is important to promote healthy weight among high school students through health education on self-assessment of healthy weight and healthy weight control behaviors.
- A doctor or nurse informed about one in five Cochise high school students that they had asthma. More than one third of students who had current asthma experienced one or more asthma attacks during the 12 months preceding the survey. This indicates the necessity of combining effective management of the disease with asthma prevention.

The Arizona Youth Risk Behavior Survey (YRBS) is one component of the Youth Risk Behavior Surveillance System (YRBSS) developed by the Centers for Disease Control and Prevention (CDC). The Youth Risk Behavior Surveillance System was designed to focus on behaviors among youth related to the leading causes of morbidity and mortality among youth and to assess how these risk behaviors change over time.

The 2005 Arizona Youth Risk Behavior Survey was conducted and over sampled in Steps communities including Yuma County, Cochise County, Santa Cruz County and the Tohono O'odham Nation. Students completed a self-administered, 99-item questionnaire. Survey procedures were designed to protect the privacy of students by allowing for anonymous and voluntary participation. Local parental permission procedures were followed before survey administration. The weighted demographic characteristics of the Cochise YRBS sample are as follows:

Gender	Percent	Grade Level	Percent	Race/Ethnicity	Percent
Females	48.9%	9th grade	31.4%	Non-Hispanic black	1.5%
Males	51.1%	10th grade	26.4%	Hispanic/Latino	46.9%
		11th grade	22.3%	Non-Hispanic white	47.1%
		12th grade	19.6%	All other races	2.7%
		Other	0.3%	Multiple races	1.8%

The results of survey questions and weighted percentages are included in Appendix B and C. The responses in the report represent all students in grades 9-12 surveyed unless otherwise specified. The report presents selected findings from the 2005 Arizona YRBS that measure health-risk behaviors and self-reported health status of five categories:

Section 1: Tobacco Use

Section 2: Healthy Eating and Physical Activity

Section 3: Weight

Section 4: Asthma

Section 5: Diabetes

The Youth Risk Behavior Surveillance System used independent two-stage cluster samples for the surveys to obtain countywide cross-sectional data representative of high school students in grades 9-12. The first stage sampling consisted of all public and charter schools at the high school level. Schools were selected with a probability proportional to school enrollment size. For the second sampling stage, classes of a required subject or a required school period were randomly selected. All students in the selected classes were eligible to participate in the survey. Students, parents, schools and school districts had the opportunity to decline participation. In Cochise County, 1,501 students in 9 public high schools completed the Youth Risk Behavior Survey during the spring of 2005. The school response rate was 90 percent, the student response rate was 86 percent, and the overall response rate was 77 percent.

All the statistical analyses were conducted using SAS 9.1. The PROC SURVEYMEANS procedure in SAS 9.1 was used to perform the analysis of the mean and 95% confidence intervals (CI) of the prevalence of health-risk behaviors and health status from YRBS. This procedure uses the method of Taylor series linearization for variance estimation and accounts for the complex sample design of YRBS.

The data presented in this report were weighted to take into account the probability of selection and to reflect the actual sex, grade, and racial/ethnic composition of high schools in Cochise County. The weighted results provide countywide estimates of all high school students (grades 9-12) and can be used to make important inferences concerning the priority health-risk behaviors of all regular public school students in grade 9 through 12.

To produce statistically representative estimates, the prevalence rates of a given health-risk behavior or status for some subgroups are not presented due to the small number in that subgroup population. Estimates with relative standard errors of 30% or higher are considered unreliable and are not presented. Differences between percentages were evaluated using two-side t-test at the 0.05 level and assuming independence. Terms such as "greater than" and "less than" indicate a statistically significant difference. Terms such as "similar" and "no difference" indicate that the statistics being compared were not significantly different. A lack of commentary about any two estimates does not necessarily mean that a t-test was performed and the difference was found to be not statistically significant.

Background

Tobacco use is the leading preventable cause of premature mortality in the United States with 18 percent of all deaths attributable to tobacco use. Cigarette smoking increases the risk of heart disease, chronic obstructive pulmonary disease, acute respiratory illness, stroke, and several kinds of cancer (lung, larynx, mouth, esophagus, pharynx, and bladder). Cigarette smoking also contributes to cancer of the pancreas, kidney, and cervix. Smoking during pregnancy causes spontaneous abortions, low birth weight, and sudden infant death syndrome. Studies also have found that secondhand smoke exposure causes heart disease among adults. Furthermore, tobacco use may increase the probability that an adolescent will use other drugs. Preventing tobacco use among youth has emerged as a major focus of tobacco control efforts. (1,2,3)

Overview

Overall, about 64 percent of Cochise high school students had ever tried cigarette smoking. About one in five (21.4%) students smoked before age 13 years. Approximately half (50.7%) of Cochise high school student smokers tried to quit tobacco use. Among students who were less than 18 years of age and who were current smokers, one in seven (15.5%) usually got their own cigarettes by buying them in a store or gas station during the past 30 days. More Cochise (64.3%) high school students had ever tried cigarettes than those of Arizona (58.2%). Also, The high school students in Cochise were more likely to smoke cigarettes (25.0%) during the 30 days preceding the survey, compared to that (21.4%) of high school students in Arizona. More Cochise (21.4%) high school students smoked before 13 years of age than Arizona counterparts (16.3%) (Table 1).

Table 1. Percent of tobacco use among high school students—Youth Risk Behavior Survey, Cochise and Arizona, 2005

Tobacco Use	Coc	Cochise		zona
Todacco Use	%	SE*	%	SE
Lifetime cigarette use ¹	64.3	1.9	58.2	1.6
Current cigarette use ²	25.0	1.5	21.4	0.9
Current frequent cigarette use ³	8.4	1.2	7.5	0.6
Smoked cigarettes before age 13 years	21.4	2.1	16.3	0.9
Smoked ≥10 cigarettes/day during past month	7.4	2.0	10.1	1.5
Smoked daily during the past month	14.5	1.5	12.7	0.8
Got cigarettes in store 30 days ⁴	15.5	3.7	11.4	1.3
Smoked at school during the past month	7.5	1.2	4.7	0.6
Among smokers, tried to quit smoking	50.7	3.8	51.1	2.8

¹Ever tried cigarette smoking, even one or two puffs.

DATA SOURCE: Arizona Youth Risk Behavior Survey, 2005

Cigarette Smoking

In Cochise, almost one in five (21.4%) high school students smoked during the past month. Male high school students were more likely to start smoking early than female students, with 22.9 percent of

² Smoked cigarettes on ≥ 1 of the 30 days preceding the survey.

³ Smoked cigarettes on \geq 20 of the 30 days preceding the survey.

⁴ Among students who are less than 18 years of age and who are current smokers.

^{*}Standard Error

male high school students who smoked cigarettes before age 13 years. Overall, the prevalence of current cigarette use was higher among 9th grade (25.1%), 10th grade (22.6%) and 12th grade (36.0%) than 11th grade (17.9%) students. Students 18 years or older were more likely to have smoked cigarettes on at least one of the 30 days preceding the survey (Table 2).

Table 2. Percent of tobacco use among high school students by selected characteristics—Youth Risk Behavior Survey, Cochise, 2005

Selected Characteristic	Smoked	before 13	Lifetime cigarette use ¹		Current Smoker ²	
Selected Characteristic	%	SE*	%	SE	%	SE
All	21.4	2.1	64.3	1.9	25.0	1.5
Gender						
Female	19.5	2.3	64.0	3.0	24.4	2.4
Male	22.9	2.9	64.3	2.4	25.3	2.2
Race/Ethnicity						
Non-Hispanic White	20.3	2.4	57.6	3.0	22.2	2.3
Non-Hispanic Black			60.2	12.6	45.2	11.4
Hispanic or Latino	21.3	2.6	70.2	2.5	25.6	2.5
American Indian			87.2	13.8	†63.9	22.6
Other Race			†51.7	23.4		
Multiple Races	29.7	7.0	72.4	5.7	36.0	7.4
Grade level						
9th grade	26.8	3.3	63.2	3.1	25.1	3.3
10th grade	17.8	3.0	62.4	3.8	22.6	2.8
11th grade	18.6	4.0	57.4	4.6	17.9	2.5
12th grade	20.0	4.0	75.0	5.5	36.0	5.4
Age group						
15 years or younger	23.5	2.8	58.1	2.9	22.3	2.2
16 or 17 years old	19.5	3.0	65.8	3.3	24.1	2.5
18 years or older	22.4	4.1	76.9	4.9	37.1	6.1

¹ Have ever tried cigarette smoking, even one or two puffs.

DATA SOURCE: Arizona Youth Risk Behavior Survey, 2005.

² Smoked cigarettes on ≥ 1 of the 30 days preceding the survey.

[†] Estimates preceded by an asterisk have a relative standard error of 30% or higher should be used with caution, as they do not meet the standard of reliability or precision.

⁻⁻ Estimates with relative standard error of 50% or higher are not reported.

^{*}Standard Error

Where are Students Getting Cigarettes?

Among Cochise high school students who smoked during the past 30 days, most students obtained cigarettes in the following ways: the student purchased his/her own cigarettes from stores, someone else bought the cigarettes, or borrowed from someone else. Few took cigarettes from store/family or used vending machines (Figure 1).

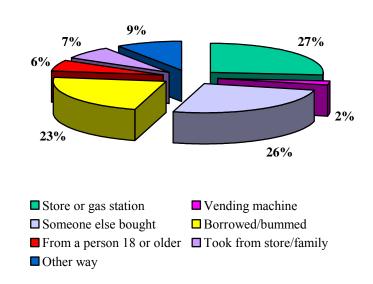


Figure 1. The access to cigarettes among high school students --YRBS, Cochise, 2005

Discussion

About 64 percent of Cochise high school students had ever smoked one or two puffs of cigarette. Although more than half of high school student smokers tried to quit, one in four high school students in Cochise County smoked during the past month. Tobacco use put youth at increased risk for developing acute respiratory illness, chronic diseases such as heart disease and cancer, as well as using other illegal drugs. The risk factors associated with initiation of tobacco use among youth include sociodemographic, environmental, and personal factors as following: 1) Low socioeconomic status; 2) Accessibility and availability of tobacco products, cigarette advertising and promotion practices, the price of tobacco products, perceptions that tobacco use is normal, peers' and siblings' use and approval, and lack of parental involvement; 3) Low self-image and low self-esteem, the belief that tobacco use provides a benefit, and the lack of ability to refuse offers to use tobacco. (1,2,3)

Smokers find it difficult to quit because of the addiction to nicotine, which usually begins in adolescence. Therefore, in addition to policy changes in health care systems to promote smoking cessation, efforts should be directed to prevent adolescents from starting to smoke, to reduce their access to tobacco products and reduce their exposure to environmental tobacco smoke. Further reducing the prevalence of tobacco use among adolescents will require continued efforts in: 1) devising targeted and

effective media campaigns; 2) reducing depictions of tobacco use in entertainment media; 3) instituting campaigns to discourage family and friends from providing cigarettes to young persons; 4) promoting smoke-free homes; 5) instituting comprehensive school-based programs and policies in conjunction with supportive community activities to prevent smoking initiation and encourage smoking cessation; 6) decreasing the number of adult smokers (e.g., parents) to present more nonsmoking role models. (1,2)

The Centers for Disease Control and Prevention (CDC) has developed the following guidelines ⁽⁴⁾ summarizing school-based strategies most likely to be effective in preventing tobacco use among youth:

- > Develop and enforce a school policy on tobacco use.
- ➤ Provide instruction about the short- and long-term negative physiologic and social consequences of tobacco use, social influences on tobacco use, peer norms regarding tobacco use, and refusal skills.
- ➤ Provide tobacco-use prevention education in kindergarten through 12th grade. This instruction should be especially intensive in junior high or middle school and should be reinforced in high school.
- ➤ Provide program-specific training for teachers.
- > Involve parents or families in support of school-based programs to prevent tobacco use.
- > Support cessation efforts among students and all school staff who use tobacco.
- Assess the tobacco-use prevention program at regular intervals.

References

- 1. Department of Health and Human Services (HHS). Healthy People 2010 N Tobacco Use Objectives. Available at http://www.healthypeople.gov/Document/HTML/Volume2/27Tobacco.htm
- Centers for Disease Control and Prevention. Cigarette Use Among High School Students —
 United States, 1991–2003. MMWR 2004; 53:23. Available at
 http://www.cdc.gov/mmwr/PDF/wk/mm5323.pdf
- 3. American Lung Association. Trends in Tobacco Use (January 2006). Available at http://www.lungusa.org/atf/cf/%7B7A8D42C2-FCCA-4604-8ADE-7F5D5E762256%7D/Smoking2006.pdf
- 4. Guidelines for School Health Programs to Prevent Tobacco Use and Addiction. Morbidity & Mortality Weekly Report February 25, 1994;43(RR-2):1-18. Available at http://ftp.cdc.gov/pub/Publications/mmwr/rr/rr4302.pdf

Background

The importance of healthy eating and physical activity in reducing rates of chronic diseases and death from these diseases has been well established. Development of healthy eating and physical activity habits in childhood that are maintained into adulthood can prevent or delay many chronic diseases. (1,2)

Dietary factors are associated with four of the ten leading causes of death: coronary heart disease, some types of cancer, stroke, and type 2 diabetes. Healthy eating habits with higher intakes of fruits and vegetables are associated with a decreased risk of becoming overweight, heart disease and some types of cancer. Consumption of foods with too much saturated fat and calories has been a public health concern. It is essential to have a healthy diet with vegetables, fruits, and grain products that are high in vitamins and minerals, carbohydrates. Calcium is essential for the forming and maintaining healthy bones and teeth. Low calcium intake during the first two to three decades of life put people at risk of developing osteoporosis. (1,4)

Regular physical activities helps build and maintain healthy bones and muscles, control weight, build lean muscle, and reduce fat. The Surgeon General's report on physical activity and health concluded that moderate physical activity could substantially reduce the risk of developing or dying from heart disease, diabetes, colon cancer, and high blood pressure. Also, people with other risk factors for coronary heart disease (CHD), such as obesity and hypertension, may particularly benefit from physical activity. In addition, physical activity may protect against lower back pain and some forms of cancer (for example, breast cancer). Over time, regular physical activity decreases the risk of dying prematurely and can increase life expectancy. Furthermore, physical activity can reduce feelings of depression and anxiety and promotes psychological well-being, of particular benefit to adolescents. A study linked sedentary lifestyles to 23 percent of chronic disease-related deaths in the United States (Hahn RA 1990). Television, computer and video games may contribute to adolescents' inactive lifestyles. (1,5)

Overview

In 2005, less than one fifth (17.8%) of Cochise high school students ate five or more servings of fruits and vegetables per day during the past 7 days preceding the survey. About 23 percent of Cochise high school students had three or more servings per day of diary products such as milk, yogurt, or cheese during the past 7 days. One in three (33.0%) of Cochise high school students had not participated in sufficient vigorous physical activity and had not participated in sufficient moderate physical activity during the past 7 days preceding the survey. The Centers for Disease Control and Prevention recommends that children and adolescents participate in at least 60 minutes of moderate intensity physical activity most days of the week, preferably daily. However, only 36.2 percent of Cochise high school students were physically active for a total of 60 minutes or more per day on five or more of the 7 days preceding the survey. Cochise (56.7%) high school students were more likely to participate in sports teams than those of Arizona (47.1%). Cochise (14.4%) high school students were less likely to play computer or video games than those of Arizona (18.6%). However, about 40 percent of Cochise

high school students watched three or more hours per day of TV on an average school day, compared to those of Arizona (32.8%) (Table 3).

Table 3. Percent of healthy eating and physical activity behaviors among high school students—Youth Risk Behavior Survey, Cochise and Arizona, 2005

Haalda Daharrian	Coc	hise	Arizona	
Health Behavior	%	SE*	%	SE
Ate 5-A-Day ¹	17.8	1.6	15.2	1.0
Had \geq 3 dairy products per day	22.5	1.5	20.0	1.0
Ate baked food daily	21.0	2.3	21.5	1.0
Drank regular soda daily	30.4	2.1	29.9	1.1
Had sugared beverages daily	23.2	1.7	20.0	1.0
Ate breakfast daily	31.7	1.6	26.4	1.1
Ate fast food daily	10.5	1.1	10.7	1.1
Vigorous physical activity ²	62.1	2.4	62.5	1.7
Moderate physical activity ³	29.5	2.2	28.1	1.1
Insufficient physical activity ⁴	33.0	1.9	33.1	1.6
No exercise	9.2	1.1	8.7	0.9
Active 60 minutes on \geq 5 days	36.2	3.0	32.3	1.4
Enrolled in PE class	39.7	5.1	42.9	2.6
Attended PE class daily	25.8	4.8	26.2	2.6
Exercised ≥ 20 minutes in PE class	87.1	2.5	84.4	1.6
Played on ≥ 1 sports teams	56.7	3.0	47.1	1.6
Watched ≥ 3 hours/day of TV	39.4	1.9	32.8	1.7
Played ≥3 hours/day of computer or video games	14.4	1.7	18.6	1.1

¹ Eat five or more servings of fruits and vegetables.

Healthy Eating and Physical Activity

Overall, the prevalence of having eaten fruits and vegetables five or more time per day was higher among male (20.0%) than female (15.6%) students. The prevalence of having participated in sufficient physical activity was higher among male (72.6%) than female (61.9%) students. Also, the older students were less likely to have participated in sufficient physical activity. The students at age of 15-17 years were more likely to have had three or more servings of diary products per day than the older students (13.8%) (Table 4). The prevalence of having participated in sufficient physical activity were lower among older students, ranging from the younger age group of \leq 15 years (73%) to older age groups 16-17 years (62%) and \geq 18 years (64%,) respectively (Figure 2).

² Physical activities that made them sweat and breathe hard (eg. Basketball, soccer, running, swimming laps, fast bicycling, fast dancing, or similar aerobic activity) for \geq 20 minutes on \geq 3 of the 7 days preceding the survey.

³ Physical activities that did not make them sweat or breathe hard (eg., fast walking, slow bicycling, skating, pushing a lawn mower, or mopping floors) for \geq 30 minutes on \geq 5 or more days of the 7 days preceding the survey.

⁴ Inadequate physical activities: did not participate in at least 20 minutes of vigorous physical activity on three or more of the days and did not do at least 30 minutes of moderate physical activity on five or more of the past seven days *Standard Error

DATA SOURCE: Arizona Youth Risk Behavior Survey, 2005.

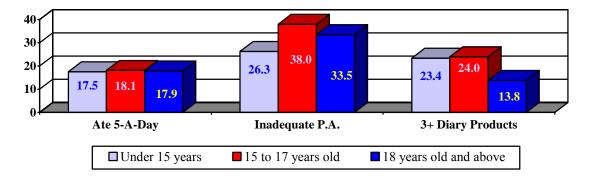
Table 4. Healthy eating behaviors and physical activity among high school students by selected characteristics—Youth Risk Behavior Survey, Cochise and Arizona, 2005

Selected Characteristic	5-A-	5-A-Day ¹		Insufficient P.A. ²		Had ≥3 diary per day	
Selected Characteristic	%	SE*	%	SE	%	SE	
All	17.8	1.6	33.0	1.9	22.5	1.5	
Gender							
Female	15.6	2.3	38.1	3.1	22.0	2.5	
Male	20.0	1.9	27.4	2.1	23.0	2.1	
Race/Ethnicity							
Non-Hispanic White	15.9	2.4	29.8	2.7	30.1	2.8	
Non-Hispanic Black	†18.4	7.9	31.6	8.3			
Hispanic or Latino	19.2	1.9	37.3	2.6	16.1	1.6	
American Indian	†42.4	18.9	36.6	3.1			
Other Race			†25.7	12.6	†47.2	17.5	
Multiple Races	16.2	3.4	20.9	5.8	9.1	1.9	
Grade level							
9th grade	17.9	2.4	29.4	3.3	20.9	3.0	
10th grade	20.2	2.9	30.6	3.1	24.9	2.3	
11th grade	15.9	3.3	34.4	3.7	23.9	3.4	
12th grade	16.5	3.5	38.6	4.8	19.8	4.7	
Age group							
15 years or younger	17.5	2.2	26.3	2.2	23.4	3.1	
16 or 17 years old	18.1	2.6	38.0	2.7	24.0	2.4	
18 years or older	17.9	4.8	33.5	3.3	13.8	3.4	

¹ Eat five or more servings of fruits and vegetables

DATA SOURCE: Arizona Youth Risk Behavior Survey, 2005.

Figure 2. Percent of Healthy Eating Behaviors and Physical Activity by Age Group --YRBS, Cochise, 2005



² Inadequate physical activities: did not participate in at least 20 minutes of vigorous physical activity on three or more days and did not do at least 30 minutes of moderate physical activity on five or more of the past seven days

[†] Estimates preceded by an asterisk have a relative standard error of 30% or higher should be used with caution, as they do not meet the standard of reliability or precision.

⁻⁻ Estimates with relative standard error of 50% or higher are not reported.

^{*}Standard Error

Daily Eating Behavior

Overall, only one third (31.7%) of Cochise high school students had breakfast everyday in the past 7 days preceding the survey. About one in ten (10.5%) Cochise high school students have had fast food everyday in the past 7 days preceding the survey. Approximately one in five (21.0%) students have had baked food daily during the past 7 days preceding the survey. The prevalence of having at least one serving of regular soda and sugared beverages daily during the past 7 days preceding the survey was 30.4 percent and 23.2 percent respectively (Figure 3).

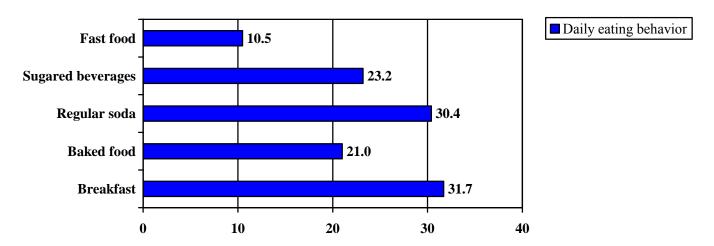


Figure 3. Percent of Daily Eating Behaviors among High School Students --YRBS, Cochise, 2005

Participation in Physical Education Class

Overall, less than 40 percent of Cochise high school students were enrolled in Physical Education (PE) class on one or more days in an average week when they were in school. About 26 percent of Cochise high school students went to PE classes 5 days in an average week when they were in school. Of students who were enrolled in PE class, 87 percent actually exercised or played sports more than 20 minutes during an average PE class. Male (48.3%) high school students were more likely than females (31.1%) to have been enrolled in PE class. Also, the prevalence of having been enrolled in PE class significantly decreased from 60.0 percent among 9th grade to 28.6 percent of 10th graders. Less than one third of students in 12th grade were enrolled in PE class. The prevalence of daily PE class attendance followed a similar decreasing pattern among students, from 42.7 percent (9th grade) to 19.1 percent (12th grade). Nevertheless, about four in five students who enrolled in PE class continued exercising or playing sports for more than 20 minutes during an average PE class (Table 5).

Table 5. Percent of high school students who were enrolled in physical education (PE) class, attended PE class daily, and spent ≥ 20 minutes exercising or playing sports during an average PE class, by selected characteristics—Youth Risk Behavior Survey, Cochise, 2005

Salastad Chamataristia			Attended	PE class	Exercised sports ≥ 20	or played minutes in	
Selected Characteristic	Enrolled in	PE class ¹	dai	daily ²		PE class ³	
	%	SE*	%	SE	%	SE	
All	39.7	5.1	25.8	4.8	87.1	2.5	
Gender							
Female	31.1	6.4	22.5	5.9	90.1	1.9	
Male	48.3	5.0	29.3	4.5	85.4	3.9	
Race/Ethnicity							
Non-Hispanic White	40.7	6.5	35.3	6.4	86.4	4.2	
Non-Hispanic Black					39.4		
Hispanic or Latino	41.4	5.3	17.1	4.8	88.5	2.5	
American Indian	†49.6	23.4			71.4	3.7	
Other Race	24.5	1.3	22.2	1.1	90.7		
Multiple Races	†22.4	7.3	†13.1	5.3	96.1	0.4	
Grade level							
9th grade	60.0	3.3	42.7	4.2	87.4	3.7	
10th grade	28.6	4.6	15.9	3.7	89.4	4.2	
11th grade	36.2	6.2	20.7	4.4	85.7	3.5	
12th grade	27.4	7.8	†19.1	8.6	84.6	5.5	
Age group							
15 years or younger	53.5	7.4	39.2	7.6	87.5	3.5	
16 or 17 years old	32.8	5.1	17.2	4.6	86.5	3.1	
18 years or older	†25.7	7.7	†19.1	7.6	87.8	7.0	

¹ On one or more days in an average week when they were in school.

Other Activities among Cochise High School Students

Overall, 57 percent of Cochise high school students played on one or more sports teams during the 12 months preceding the survey. Male high school students were more likely than female students to play on one or more sports teams (59.1% vs. 54.3%). Also, female students (44.7%) were more likely to have watched three or more hours per day of TV than male students (34.4%). However, male (17.5%) high school students were more likely than female (11.0%) to play video or computer games or use a computer for something that is not school work for three or more hours per day on an average school day. Therefore, no significant difference was found between females and male students regarding to the

²5 days in an average week when they were in school.

³ Exercised or played sports ≥ 20 minutes during an average PE class among the students enrolled in PE class.

[†] Estimates preceded by an asterisk have a relative standard error of 30% or higher should be used with caution, as they do not meet the standard of reliability or precision.

⁻⁻ Estimates with relative standard error of 50% or higher are not reported.

^{*}Standard Error

DATA SOURCE: Arizona Youth Risk Behavior Survey, 2005.

percent of students who have had not participated in any vigorous or moderate physical activity during the past seven days preceding the survey were (Figure 4).

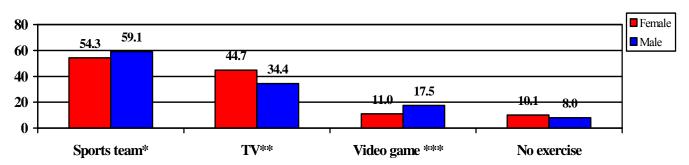


Figure 4. Activities among High School Students by Gender --YRBS, Cochise, 2005

Discussion

The above results reveal that among Cochise high school students, less than one fifth ate five or more servings of fruits and vegetables and one in three did not meet CDC recommendations for sufficient physical activity. Only 23 percent of Cochise high school students had three or more diary products daily. About one in five students ate baked food, drank regular soda, and had sugared beverages daily. About one in ten students ate fast food daily. However, only one in three students ate breakfast daily. Almost 40 percent of Cochise high school students watched three or more hours of TV per day. The current unhealthy eating and physical inactivity behaviors among youth Cochise County place them at risk of premature death from several conditions, including coronary heart disease, some cancers, stroke, diabetes, and depression, as discussed in the background section. To establish healthy eating and physical activity behaviors needs to begin in childhood. Efforts should be focused on preventing chronic diseases associated with diet and weight, strengthening the link between nutrition and physical activity in health promotion, and improving accessibility of nutrition information, nutrition education, nutrition counseling and related services, and healthful foods in a variety of settings. (2,6,8)

To help school-aged children establish healthful eating habits early in life, it is essential to provide them with informative nutrition education. Research suggests that parents who understand proper nutrition can help children in preschool choose healthful foods, but they have less influence on the choices of school-aged children. Thus, the impact of nutrition education on health may be more effective if targeted directly at school-aged children. Nutrition education should be taught as part of a comprehensive school health education program, and essential nutrition education topics should be integrated into science and other curricula to reinforce principles and messages learned in the health units. Nutrition education should be addressed within a school health education objective. Meanwhile, students must have access to healthful food choices to further enhance the likelihood of adopting

^{*} Played on ≥1 sports teams

^{**} Watched \ge 3 hours/day TV

^{***} Played \ge 3 hours/day Video game

healthful dietary practices. For these reasons, monitoring students' eating practices at school is important. Policymakers and program planners should provide leadership in fostering healthful diets and physical activity patterns among youths in the community. The family members, health care practitioners, schools, worksites, institutional food services, and the media can play a key role in this process. In addition, food-related businesses can help consumers achieve healthful diets by providing nutrition information for foods purchased in supermarkets, fast-food outlets, restaurants, and carryout operations. Furthermore, it is essential to reduce the consumption of away-from-home foods, since they are generally higher in saturated fat, total fat, cholesterol, and sodium and lower in dietary fiber, iron, and calcium than at-home foods. CDC has developed seven recommendations for school health programs to promote healthy eating. These recommendations address school policy on nutrition, a sequential, coordinated curriculum, appropriate and fun instruction for students, integration of school food service and nutrition education, staff training, family and community involvement, and program evaluation. (2,3,6,8,9)

The Guide to Community Preventive Services provides recommendations to promote physical activity in communities (2,3,9):

- Enhance the length or activity levels in Physical education classes taught in schools.
- Interventions focus on changing physical activity behavior through building, strengthening, and maintaining social networks that provide supportive relationships for behavior change.
- ➤ Efforts of schools, coalitions, agencies, and communities in attempts to change the local environment to create opportunities for physical activity.

References

- 1. Youth Risk Behavior Survey (YRBS) Item rationale for the 2005 core questionnaire. Available at http://www.cdc.gov/HealthyYouth/yrbs/pdfs/2005itemrationale.pdf
- 2. Community Intervention Guide. Available at http://www.thecommunityguide.org/
- 3. Building a Healthier Future Through School Health Programs. Available at http://www.cdc.gov/HealthyYouth/publications/pdf/HealthierFuture.pdf
- 4. Department of Health and Human Services (HHS). Healthy People 2010 Nutrition and Overweight Objectives. Available at http://www.healthypeople.gov/Document/HTML/Volume2/19Nutrition.htm
- 5. Department of Health and Human Services (HHS). Healthy People 2010 Physical Activity and Fitness Objectives. Available at http://www.healthypeople.gov/Document/HTML/Volume2/22Physical.htm
- 6. Promising Practices in Chronic Disease Prevention and Control: A Public Health Framework For Action. Available at http://www.cdc.gov/nccdphp/publications/PromisingPractices/pdfs/PromisingPractices.pdf
- 7. Dietary Guidelines for Americans 2005. Available at http://www.health.gov/dietaryguidelines/
- 8. Hahn RA, Teutsch SM, Rothenberg RB, Marks JS. Excess deaths from nine chronic diseases in the United States, 1986. *JAMA* 1990; 264:2654-9.
- 9. Guidelines for School Health Programs to Promote Lifelong Healthy Eating *MMWR* June 14, 1996 / 45(RR-9);1–33. Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/00042446.htm

Background

In the United States, the prevalence of overweight among adolescents tripled in the last two decades. Although body weight is associated with genetics factor, the lack of physical activity and unhealthy eating habits play an important role in overweight among adolescents. (1,2)

In adolescence, obesity is associated with type 2 diabetes, high blood lipids, hypertension, and abnormal glucose tolerance. Early maturation and orthopedic problems also occur with increased frequency in overweight youth. Childhood overweight is associated with adverse psychological and social consequences, specifically discrimination. In addition, overweight and obesity acquired during childhood or adolescence may persist into adulthood and increase the risk later in life for coronary heart disease, gallbladder disease, some types of cancer, and osteoarthritis of the weight-bearing joints. In addition, studies have shown high rates of body dissatisfaction and dieting among adolescent females, with many engaging in unhealthy weight control behaviors, such as fasting and self-induced vomiting, which can lead to adverse consequences on their physical and psychological development. (1,2,5)

Overview

About one in four (26.7%) Cochise students were at or above 85th percentile for sex and age specific Body Mass Index (BMI)—overweight or at risk of becoming overweight. Overall, 31.6 percent of Cochise students considered themselves as slightly overweight or overweight. Some students tried to lose weight through eating less food or exercising more during the past month preceding the survey. Other students tried other unhealthy methods to lose weight (Table 6).

Table 6. Percent of healthy eating and physical activity behaviors among high school students— Youth Risk Behavior Survey, Cochise and Arizona, 2005

Health Behavior -	Cochise		Arizona	
nealth behavior	%	SE*	%	SE
Overweight ¹	11.9	1.3	11.9	1.0
At risk of becoming overweight ²	14.8	1.5	13.6	0.9
Self-perceived overweight	31.6	1.6	32.0	1.0
Tried to lose weight	47.5	1.8	45.9	1.2
Ate less food to lose weight	39.7	2.3	39.3	1.3
Exercised to lose weight during the past month	61.0	2.0	60.7	1.3
Fasting \geq 24 hours to lose weight	15.0	1.5	14.5	1.1
Took diet pills, powders or liquids to lose weight	10.2	1.3	7.9	0.6
Vomited/took laxatives to lose weight	6.5	1.2	6.6	0.6

¹ Students who were at or above 95th percentile for sex- and age-specific Body Mass Index (BMI)
² Students who were at or above 85th percentile but less than 95th percentile for sex- and age-specific BMI.

DATA SOURCE: Arizona Youth Risk Behavior Survey, 2005.

^{*}Standard Error

Overweight

Male high school students were more likely to be overweight or at risk of becoming overweight than females (34.6% vs. 18.4%). Also, more Hispanic high school students (17.3%) were at risk of overweight than Non-Hispanic white students (12.1%) (Table 7).

Table 7. Percent of overweight and at risk of overweight high school students by selected characteristics—Youth Risk Behavior Survey, Cochise, 2005

Salastad Characteristic	Overw	eight ¹	At risk of o	At risk of overweight ²	
Selected Characteristic	%	SE*	%	SE	
All	11.9	1.3	14.8	1.5	
Gender					
Female	7.2	1.3	11.2	1.6	
Male	16.4	2.1	18.2	2.1	
Race/Ethnicity					
Non-Hispanic White	10.8	2.2	12.1	2.7	
Non-Hispanic Black	†14.1	7.1	†31.2	12.7	
Hispanic or Latino	13.0	1.5	17.3	1.6	
American Indian					
Other Race	9.7	0.6	2.9	0.2	
Multiple Races	17.3	4.6	†18.0	6.6	
Grade level					
9th grade	13.6	2.7	14.9	2.8	
10th grade	12.0	1.8	13.3	1.9	
11th grade	10.1	2.1	15.0	3.3	
12th grade	†11.3	3.4	16.1	2.6	
Age group					
15 years or younger	11.6	2.8	13.7	2.3	
16 or 17 years old	12.6	1.7	15.4	1.8	
18 years or older	†9.7	3.7	15.7	4.3	

DATA SOURCE: Arizona Youth Risk Behavior Survey, 2005.

Self-perception of Overweight and Intention to Lose Weight

Overall, about one third (31.6%) of high school students in Cochise described themselves as overweight. Female (35.3%) students were more likely to consider themselves as overweight than male (27.9%). Also, females (62.1%) were more likely to have intention to lose weight than male (33.2%) students. The percent of students who self-perceived overweight and have intention to lose weight were higher among Hispanic students than non-Hispanic white students (Table 8).

¹ Students who were at or above 95th percentile for sex- and age-specific Body Mass Index (BMI)
² Students who were at or above 85th percentile but less than 95th percentile for sex- and age-specific BMI.

[†] Estimates preceded by an asterisk have a relative standard error of 30% or higher should be used with caution, as they do not meet the standard of reliability or precision.

⁻⁻ Estimates with relative standard error of 50% or higher are not reported.

^{*}Standard Error

Table 8. Percent of self-perceived overweight and intention to lose weight among high school students by selected characteristics—Youth Risk Behavior Survey, Cochise, 2005

Selected Characteristic	Self-perceive	d overweight1	Intention to lose weight ²	
Selected Characteristic	%	SE*	%	SE
All	31.6	1.6	47.5	1.8
Gender				
Female	35.3	2.4	62.1	2.7
Male	27.9	2.3	33.2	2.3
Race/Ethnicity				
Non-Hispanic White	28.4	3.4	42.8	3.4
Non-Hispanic Black	46.3	12.7	58.6	9.0
Hispanic or Latino	34.6	1.9	52.7	2.0
American Indian	6.7	1.3	2.9	0.6
Other Race	†48.6	21.4	†55.6	23.5
Multiple Races	36.3	5.8	53.2	5.3
Grade level				
9th grade	30.7	3.4	46.4	3.7
10th grade	28.8	2.9	44.1	2.7
11th grade	30.7	3.1	48.5	4.5
12th grade	37.1	4.8	51.5	3.1
Age group				
15 years or younger	27.4	3.2	46.0	2.9
16 or 17 years old	33.3	2.5	48.8	2.9
18 years or older	37.6	5.0	47.3	6.2

¹ Students who described themselves as slightly or very overweight.

Weight control behaviors

Overall, about 48 percent of Cochise high school students tried to lose weight. The prevalence of healthy behaviors for weight control among Cochise high school students were 39.7 percent who ate less food or calories and 61.0 percent who exercised (Table 9). Also, more females tended to control their weight than male students by eating less (51.3% vs. 28.5%) or exercising (70.0% vs. 52.5%). However, some students tried to control weight through unhealthy behaviors including fasting (15.0%), taking pills (10.2%) without a physician's advice, and vomiting/taking laxatives (6.5%) (Table 6).

² Students who were trying to lose weight.

[†] Estimates preceded by an asterisk have a relative standard error of 30% or higher should be used with caution, as they do not meet the standard of reliability or precision.

^{*}Standard Error

DATA SOURCE: Arizona Youth Risk Behavior Survey, 2005.

Table 9. Percent of weight control behaviors among high school students by selected characteristics—
Youth Risk Behavior Survey, Cochise, 2005

Selected Characteristic	Ate less to	lose weight	Exercised to	lose weight
Selected Characteristic	%	SE*	%	SE
All	39.7	2.3	61.0	2.0
Gender				
Female	51.3	3.2	70.0	2.3
Male	28.5	2.8	52.5	3.2
Race/Ethnicity				
Non-Hispanic White	37.1	3.7	58.9	2.9
Non-Hispanic Black	52.6	11.3	66.9	5.9
Hispanic or Latino	43.5	2.2	64.9	2.7
American Indian			32.5	18.4
Other Race				
Multiple Races	34.0	4.6	†57.1	4.8
Grade level				
9th grade	39.9	2.9	65.1	3.6
10th grade	35.1	3.1	59.0	3.0
11th grade	41.4	4.4	62.7	3.3
12th grade	43.6	4.3	55.9	4.1
Age group				
15 years or younger	39.6	3.0	63.4	2.9
16 or 17 years old	40.6	3.5	59.8	2.7
18 years or older	36.9	4.2	58.8	5.2

[†] Estimates preceded by an asterisk have a relative standard error of 30% or higher should be used with caution, as they do not meet the standard of reliability or precision.

DATA SOURCE: Arizona Youth Risk Behavior Survey, 2005.

Discussion

One fourth of Cochise high school students were overweight or at risk of becoming overweight. Overall, the prevalence of overweight or at risk of overweight among Cochise high school students was similar to students of Arizona. Also, Cochise high school students displayed similar pattern of healthy eating and exercise behaviors to those students of Arizona. Although more Cochise students played on sports teams during the past 12 months preceding the survey, more of them watched 3 hours of TV per day than their Arizona counterparts, which may contribute to obesity among high school students.

Obesity has psychosocial consequences and it also contributes to developing type 2 diabetes, hypertension and hyperlipidimia. Obesity prevention involves a focus on energy balance—calories consumed versus intake calories expended. Although about half of students tried to lose weight through eating less or exercise, a big proportion of students (26.2%) tried to vomit or took laxatives and some tried more than 24 hours of fasting or took diet pills to lose weight. It is important to promote healthy weight among high school students through health education on self-assessment of healthy weight and

⁻⁻ Estimates with relative standard error of 50% or higher are not reported.

^{*}Standard Error

healthy weight control behaviors. Studies show that replacing foods of high energy density (high calories per weight of food) with foods of lower energy density, such as fruits and vegetables, can be an important part of a weight management strategy. To maintain weight loss, healthful dietary habits must be coupled with decreased sedentary behavior and increased physical activity as a permanent lifestyle. Additionally, changes in the physical and social environment may help persons maintain the necessary long-term lifestyle that influence both diet and physical activity. Although it appears straightforward, these factors result from complex interactions across a number of social, environmental, and policy contexts. American children live in a society that has changed dramatically in the three decades over which the obesity epidemic has developed. (1,2,3,5)

The Institute of Medicine's Committee on Prevention of Obesity in Children and Youth recommends the following strategies to combat the battle of reducing children obesity (4):

- 1. Industry and media:
 - ➤ Develop healthier food and beverage product and packaging innovations
 - > Expand consumer nutrition information
 - > Provide clear and consistent media messages
- 2. State and local governments:
 - Expand and promote opportunities for physical activity in the community through changes to ordinances, capital improvement programs, and other planning practices
 - ➤ Work with communities to support partnerships and networks that expand the availability of and access to healthful foods
- 3. Health care professionals:
 - ➤ Routinely track body mass index (BMI) in children and youth and offer appropriate counseling and guidance to children and their families
- 4. Community and nonprofit organizations:
 - ➤ Provide opportunities for healthful eating and physical activity in existing and new community programs, particularly for high-risk populations
- 5. State and local education authorities and schools:
 - > Improve the nutritional quality of foods and beverages served and sold in schools and as part of school-related activities
 - ➤ Increase opportunities for frequent, more intensive, and engaging physical activity during and after school
 - > Implement school-based interventions to reduce children's screen time
 - ➤ Develop, implement, and evaluate innovative pilot programs for both staffing and teaching about wellness, healthful eating, and physical activity
- 6. Parents and families:
 - Engage in and promote more healthful dietary intakes and active lifestyles (e.g., increased physical activity, reduced television and other screen time, more healthful dietary behaviors)

References

- 1. Department of Health and Human Services (HHS). Healthy People 2010 Nutrition and Overweight Objectives. Available at http://www.healthypeople.gov/Document/HTML/Volume2/19Nutrition.htm
- 2. Dietz WH. Health consequences of obesity in youth: Childhood predictors of adult disease. Pediatrics 1998 Mar;101(3) Suppl:518-525.
- 3. Can eating fruits and vegetables help people to manage their weight? Available at http://www.cdc.gov/nccdphp/dnpa/nutrition/pdf/rtp practitioner 10 07.pdf
- 4. Institute of Medicine (U.S) Committee on Prevention of Obesity in Children and Youth, Preventing Childhood Obesity: Health in the Balance. Available at http://www.iom.edu/?id=22596&redirect=0
- 5. The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity. Available at http://www.surgeongeneral.gov/topics/obesity/

Background

Asthma is a chronic lung disease characterized by episodes of inflammation and narrowing of small airways, which can cause wheezing, difficulty in breathing, and chest pain. Environmental factors such as air population and second hand tobacco smoke, along with infections, exercise and allergens can trigger asthma attacks in children who have the disease. (3,4,5,6)

Asthma is the most common cause of chronic illness and disability in children. It is the third-ranking cause of hospitalization among children under 15 (Popovic JC. 1999) and one of the leading causes of school absenteeism (CDC 2004). Asthma attacks can cause considerable discomfort and anxiety in both children and their families and may limit athletic and other activities. However, most of the problems caused by asthma could be averted if students with asthma and their health care providers managed the disease according to established guidelines. (1,2,5,6,7,11)

Overview

Overall, 22.3 percent of Cochise high school students were ever told by a doctor or nurse that they had asthma. Approximately one in seven Cochise high school students (15.9%) reported that they had current asthma. These include students with active asthma symptoms and those whose asthma was well controlled. More than one third of students who had current asthma experienced one or more asthma attacks during the 12 months preceding the survey (Table 10).

Table 10. Percent of lifetime asthma, current asthma and asthma episodes or attacks among high school students—Youth Risk Behavior Survey, Cochise and Arizona, 2005

Health Behavior	Coc	chise	Arizona		
	%	SE*	%	SE	
Lifetime asthma ¹	22.3	1.8	21.8	0.8	
Current asthma ²	15.9	1.8	17.2	0.8	
Asthma episode or attack ³	38.6	4.8	41.0	3.5	

Student was ever told by a doctor or nurse that the student had asthma (n=164)

DATA SOURCE: Arizona Youth Risk Behavior Survey, 2005

The prevalence of lifetime asthma and current asthma were similar between male and female high school students in Cochise County. Significantly fewer Hispanic high school students than Non-Hispanic white high school students reported lifetime asthma (18.4% vs. 25.9%). Also, Cochise Hispanic high school students (12.4%) were less likely to have current asthma than Non-Hispanic White high school students (19.7%). The prevalence of lifetime asthma, current asthma and asthma episode during the 12 months preceding the survey were similar among Cochise high school students across different age groups (Table 11).

² Student reported lifetime asthma and reported that during the 12 months preceding the survey, the student either had asthma but not episode or attack or had an asthma episode or attack (n=143)

³ Among students with current asthma, had an asthma episode or attack during the 12 months preceding the survey (n=51)

^{*}Standard Error

Table 11. Percent of high school students reporting lifetime asthma, current asthma, and asthma episode or attack, by selected characteristics—Youth Risk Behavior Survey, Cochise, 2005

Selected Characteristic	I ifetime	Lifetime asthma ¹		Current asthma ²		Asthma episode or attack ³	
Selected Characteristic	<u> </u>	SE*	Current	SE	<u>%</u>	SE	
All	22.3	1.8	15.9	1.8	38.6	4.8	
Gender							
Female	20.4	2.3	15.3	1.9	39.7	7.7	
Male	24.0	2.8	16.5	2.4	37.6	9.7	
Race/Ethnicity							
Non-Hispanic White	25.9	3.5	19.7	3.3	35.8	8.3	
Non-Hispanic Black	49.1	5.4	†32.4	12.1	69.7	2.1	
Hispanic or Latino	18.4	1.9	12.4	1.4	37.9	7.5	
American Indian	5.4	1.0	5.4	1.0			
Other Race	†19.0	6.0	9.6	0.5			
Multiple Races	†20.7	7.4	†10.4	5.2			
Grade level	,						
9th grade	24.0	3.1	18.8	3.5	35.2	7.3	
10th grade	16.9	2.7	14.0	2.4	38.2	8.9	
11th grade	27.9	3.2	18.2	3.1	43.7	13.6	
12th grade	19.8	3.8	10.8	2.3	42.5	14.5	
Age group							
15 years or younger	22.8	2.4	17.6	2.5	35.1	7.9	
16 or 17 years old	22.6	2.4	15.2	2.4	38.1	10.5	
18 years or older	19.5	3.9	13.3	3.4	54.8	13.9	

¹Student was ever told by a doctor or nurse that the student had asthma (n=292)

DATA SOURCE: Arizona Youth Risk Behavior Survey, 2005.

Discussion

About twenty percent of Cochise high school students were ever informed by a doctor or nurse that they had asthma and 15.9 percent of Cochise high school students reported that they had current asthma. Children with ongoing asthma symptoms are at risk for poor health outcomes, including hospitalizations and death. The findings underscore the need for health-care providers; schools, families, and public health practitioners to coordinate efforts that will help students manage their asthma and be prepared to respond to asthma-related emergency situations. (4,6)

The rapid industrialization, unpaved roads, busy traffic, and exposure to pesticides are environmental hazards that need to be controlled to reduce children's asthma due to these environmental triggers

² Student reported lifetime asthma and reported that during the 12 months preceding the survey, the student either had asthma but not an episode or attack or had an asthma episode or attack (n=216)

³ Among students with current asthma, had an asthma episode or attack during the 12 months preceding the survey (n=79)

[†] Estimates preceded by an asterisk have a relative standard error of 30% or higher should be used with caution, as they do not meet the standard of reliability or precision.

⁻⁻ Estimates with relative standard error of 50% or higher are not reported.

^{*}Standard Error

related to asthma at border communities. In the meantime, action should be taken to control children's asthma. Schools can help improve asthma management among students whose asthma is not well controlled by providing health services, education, and control of environmental triggers. The Centers for Disease Control and Prevention (CDC), other federal agencies, the National Asthma Education and Prevention Program, and national nongovernmental organizations have developed resources to support asthma management activities at schools. CDC's Strategies for Addressing Asthma Within a Coordinated School Health Program recommends research-based activities for schools to help students manage their asthma, such as obtaining a written asthma action plan for all students with asthma, ensuring that those with asthma receive education on asthma basics, asthma management, and emergency response, and prohibiting tobacco use at all times among students, staff, and visitors to schools. Students, families, schools, and health-care and public health practitioners working together can improve asthma management among students. (4,5,6,9,10)

The prevalence of lifetime asthma and current asthma were similar among Cochise high school students across different age groups. Older high school students were less likely to have had asthma episode or attack than the younger students. This difference indicates the necessity of combining effective management of the disease with asthma prevention.

Effective management of asthma comprises four major components: controlling exposure to factors that trigger asthma episodes, adequately managing asthma with appropriate medicine, monitoring the disease by using objective measures of lung function, and educating parents/family of children with asthma to become partners in managing the disease. Efforts are essential to intervene the progressing stages from disease to functional limitation and disability and to improve the quality of life for persons with asthma.

CDC has identified six strategies for schools and districts to consider when addressing asthma within a coordinated school health program. These strategies can be effective whether the program targets the entire school district or just one school. (1,8,9,10,11)

- > Establish management and support systems for asthma-friendly schools.
- > Provide appropriate school health and mental health services for students with asthma.
- > Provide asthma education and awareness programs for students and school staff.
- > Provide a safe and healthy school environment to reduce asthma triggers.
- Provide safe, enjoyable physical education and activity opportunities for students with asthma.
- ➤ Coordinate school, family, and community efforts to better manage asthma symptoms and reduce school absences among students with asthma.

References

- Department of Health and Human Services (HHS). Healthy People 2010 Respiratory Diseases Objectives. Available at http://www.healthypeople.gov/Document/HTML/Volume2/24Respiratory.htm# Toc489704825
- 2. Self-Reported Asthma Among High School Students --- United States, 2003. MMWR August 12, 2005 / 54(31);765-767. Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5431a1.htm

- 3. American Lung Association. Childhood Asthma Review (July 2005). Available at http://www.lungusa.org/site/pp.asp?c=dvLUK900E&b=22782
- 4. American Lung Association. Asthma & Children Fact Sheet (July 2005). Available at http://www.lungusa.org/site/pp.asp?c=dvLUK900E&b=44352
- 5. American Lung Association. Trends in Asthma Morbidity and Mortality (MAY 2005). Available at http://www.lungusa.org/atf/cf/{7A8D42C2-FCCA-4604-8ADE-7F5D5E762256}/ASTHMA1.PDF
- 6. Asthma's Impact on Children and Adolescents. Available at http://www.cdc.gov/asthma/children.htm
- 7. CDC Healthy Youth—Asthma. Available at http://www.cdc.gov/HealthyYouth/asthma/index.htm#2
- 8. Strategies for Addressing Asthma Within a Coordinated School Health Program. Available at http://www.cdc.gov/HealthyYouth/asthma/strategies.htm
- 9. Potentially Effective Interventions for Asthma among Children. Available at http://www.cdc.gov/asthma/interventions/children.htm
- 10. Managing Asthma: A Guide for Schools. Available at http://www.nhlbi.nih.gov/health/prof/lung/asthma/asth_sch.htm
- 11. CDC. Asthma prevalence, health care use and mortality, 2002. Hyattsville, Maryland: US Department of Health and Human Services, CDC, National Center for Health Statistics, 2004. Available at http://www.cdc.gov/nchs/data/asthmahealthestatl.pdf

Background

Diabetes is a disease in which blood glucose levels are above normal. Diabetes can cause serious health complications including heart disease, blindness, kidney failure, and lower-extremity amputations. Diabetes was the 7th leading cause of death among all Arizonians in 2004. Diabetes is one of the most common chronic diseases in children and adolescents. When diabetes strikes during childhood, it is routinely assumed to be type 1, or juvenile-onset diabetes. However, recent reports shows that type 2 diabetes (formerly known as adult-onset diabetes) has been reported with increasing prevalence among overweight children, particularly in American Indians, African Americans, and Hispanic/Latino Americans. American Indian youths have the highest prevalence of type 2 diabetes. (1,2,3,)

Diabetes can be managed through lifestyle changes and medication. Before people develop type 2 diabetes, they almost always have "pre-diabetes" – blood glucose levels that are higher than normal but not yet high enough to be diagnosed as diabetes. American Diabetes Association estimated that one in six overweight adolescents aged 12-19 have pre-diabetes. Pre-diabetes can be treated and people with pre-diabetes can prevent the development of type 2 diabetes by making changes in their diet and increasing their level of physical activity. They may even be able to return their blood glucose levels to the normal range. (1,3,4)

Overview

Approximately three percent of Cochise high school students were informed that they had diabetes by a doctor or nurse. Also, about three percent of Cochise high school students were on a special diet or exercise plan because of their diabetes. There was no difference between Cochise and Arizona regarding the prevalence of diabetes among high school students (Figure 6.)

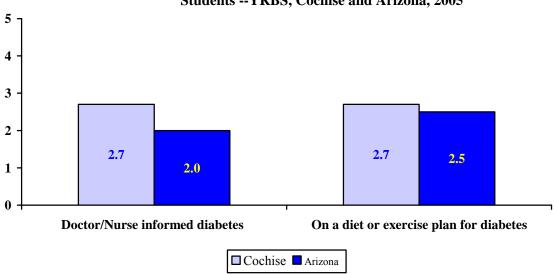


Figure 6. Prevalence Percent of Diabetes and Plan for Diabetes among High School Students --YRBS, Cochise and Arizona, 2005

Discussion

The epidemics of obesity and the low level of physical activity may be major contributors to the increase in type 2 diabetes among the youth. While some medications may delay the development of diabetes, diet and exercise are the key components for primary intervention of diabetes. Studies show that people at high risk for type 2 diabetes can prevent or delay the onset of the disease by losing 5 to 7 percent of their body weight. Just 30 minutes a day of moderate physical activity, coupled with a 5 to 10 percent of reduction in body weight, produced a 58 percent of reduction in diabetes.

About one-third of all people with diabetes have not been diagnosed (American Diabetes Association). Children and adolescents diagnosed with type 2 diabetes are generally between 10 and 19 years old, obese, with a strong family history of type 2 diabetes, and have insulin resistance. It is critical to identify diabetes-related health problems and pre-diabetes conditions among at-risk children. Physicians and parents should be aware of and monitor children's pre-diabetes conditions to provide training on diabetes prevention and control. (1,3,4,5,6)

Generally, children and adolescents with type 2 diabetes have poor glycemic control. The Task Force on Community Preventive Services recommended healthcare system interventions to optimize care and diabetes self-management education interventions in community settings to increase glycemic control among patients with diabetes. Early diagnosis, screening for the complications and disease/case management of diabetes are crucial to reducing morbidity and mortality and improve quality of life for children with diabetes. Furthermore, standard case definition(s), guidelines for treatment, and approval of oral hypoglycemic agents (to lower blood sugar) are urgently required for children and adolescents. (4,5,6)

References

- 1. American Diabetes Association: Resources for Parents and Children. Available at http://www.diabetes.org/for-parents-and-kids/resources.jsp
- 2. Diabetes in Arizona: 2005 Status Report. Available at http://www.azdhs.gov/phs/oncdps/diabetes/pdf/status_report_05.pdf
- 3. Center for Disease Control and Prevention: Diabetes Projects. Available at http://www.cdc.gov/diabetes/projects/cda2.htm
- 4. Strategies for Reducing Morbidity and Mortality from Diabetes Through Health-Care System Interventions and Diabetes Self-Management Education in Community Settings. Task Force on Community Preventive Services. ,MMWR. September 28, 2001 / 50(RR16);1-15. Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5016a1.htm
- Recommendations for healthcare system and self-management education interventions to reduce morbidity and mortality from diabetes. Task Force on Community Preventive Services. , American Journal of Prevention Medicine. Vol 22 No 4S, pp 10-14. Available at http://www.thecommunityguide.org/diabetes/dm-AJPM-recs.pdf
- 6. National Diabetes Education Program. Available at http://www.ndep.nih.gov/resources/resources.htm

The findings in this report are subject to at least four limitations. First, these data apply only to adolescents enrolled in high school. The survey is not reflective of the adolescents who are not enrolled in high school or those students who may be schooled at home in Cochise County. Nationwide, in 2001, among persons aged 16-17 years, approximately 5% were not enrolled in a high school program and had not completed high school (currently, county data for such information is not available). Second, the extent of underreporting or overreporting of health behaviors in YRBS cannot be determined, although the survey questions demonstrate test and retest reliability. Also, the extent of underreporting or overreporting of self-reported health status in YRBS such as asthma and diabetes cannot be determined and were not confirmed by medical records. Third, overweight prevalence estimates derived from selfreported data are likely to be low. However, prevalence trends from national surveys of adults using self-reported height and weight have been consistent with trends (data from national surveys using measured heights and weights). Nevertheless, the overweight prevalence estimates from self-reported height and weight can be useful in tracking trends over time. In addition, the survey is conducted in the selected high schools during the school day. As a result, the survey may not capture those students who are chronically absent from school. Furthermore, the survey was conducted in the spring season, which may not reflect the dramatic environmental change that will impact on physical activity during the summer season in Arizona.

2005 State and Local Youth Risk Behavior Survey

This survey is about health behavior. It has been developed so you can tell us what you do that may affect your health. The information you give will be used to develop better health education for young people like yourself.

DO NOT write your name on this survey. The answers you give will be kept private. No one will know what you write. Answer the questions based on what you really do.

Completing the survey is voluntary. Whether or not you answer the questions will not affect your grade in this class. If you are not comfortable answering a question, just leave it blank.

The questions that ask about your background will be used only to describe the types of students completing this survey. The information will not be used to find out your name. No names will ever be reported.

Make sure to read every question. Fill in the ovals completely. When you are finished, follow the instructions of the person giving you the survey.

Thank you very much for your help.

1 2005 YRBS

Directions

- Use a #2 pencil only.
- Make dark marks.
- Fill in a response like this: A B D.
- To change your answer, erase completely.
- Choose only one answer for each question (except question 4).
- 1. How old are you?
 - A. 12 years old or younger
 - B. 13 years old
 - C. 14 years old
 - D. 15 years old
 - E. 16 years old
 - F. 17 years old
 - G. 18 years old or older
- 2. What is your sex?
 - A. Female
 - B. Male
- 3. In what grade are you?
 - A. 9th grade
 - B. 10th grade
 - C. 11th grade
 - D. 12th grade
 - E. Ungraded or other grade
- 4. How do you describe yourself?

(Select one or more responses.)

- A. American Indian or Alaska Native
- B. Asian
- C. Black or African American
- D. Hispanic or Latino
- E. Native Hawaiian or Other Pacific Islander
- F. White

- 5. How do you describe your health in general?
 - A. Excellent
 - B. Very good
 - C. Good
 - D. Fair
 - E. Poor
- 6. How tall are you without your shoes on?

Directions: Write your height in the shaded blank boxes. Fill in the matching oval below each number.

Example

HEIGHT				
Feet Inches				
5	11			
3	0			
4	①			
•	2			
6	3			
7	4			
	(5)			
	6			
	7			
	8			
	9			
	10			
	•			

7. How much do you weigh without your shoes on?

Directions: Write your weight in the shaded blank boxes. Fill in the matching oval below each number.

Example

Weight						
Pounds						
1	5	3				
	0	0				
3	(I)	(1)				
3	2	2				
	3					
	4)	4)				
	•	(5)				
	6	6				
	7	7				
	8	8				
	9	9				

- 8. How long have you been going to this school?
 - A. Less than a month
 - B. 1 to 3 months
 - C. 4 to 6 months
 - D. 7 to 9 months
 - E. 10 to 12 months
 - F. More than a year
- 9. During the past 12 months, how would you describe your grades in school?
 - A. Mostly A's
 - B. Mostly B's
 - C. Mostly C's
 - D. Mostly D's
 - E. Mostly F's
 - F. None of these grades
 - G. Not sure

The next 4 questions ask about personal safety.

- 10. **When you rode a bicycle** during the past 12 months, how often did you wear a helmet?
 - A. I did not ride a bicycle during the past 12 months
 - B. Never wore a helmet
 - C. Rarely wore a helmet
 - D. Sometimes wore a helmet
 - E. Most of the time wore a helmet
 - F. Always wore a helmet
- 11. How often do you wear a seat belt when **riding in** a car driven by someone else?
 - A. Never
 - B. Rarely
 - C. Sometimes
 - D. Most of the time
 - E. Always
- 12. During the past 30 days, how many times did you **ride** in a car or other vehicle **driven by someone who had been drinking alcohol?**
 - A. 0 times
 - B. 1 time
 - C. 2 or 3 times
 - D. 4 or 5 times
 - E. 6 or more times
- 13. During the past 30 days, how many times did you **drive** a car or other vehicle **when you had been drinking alcohol?**
 - A. 0 times
 - B. 1 time
 - C. 2 or 3 times
 - D. 4 or 5 times
 - E. 6 or more times

The next 11 questions ask about violence-related behaviors.

- 14. During the past 30 days, on how many days did you carry **a weapon** such as a gun, knife, or club?
 - A. 0 days
 - B. 1 day
 - C. 2 or 3 days
 - D. 4 or 5 days
 - E. 6 or more days
- 15. During the past 30 days, on how many days did you carry **a gun?**
 - A. 0 days
 - B. 1 day
 - C. 2 or 3 days
 - D. 4 or 5 days
 - E. 6 or more days
- 16. During the past 30 days, on how many days did you carry a weapon such as a gun, knife, or club **on** school property?
 - A. 0 days
 - B. 1 day
 - C. 2 or 3 days
 - D. 4 or 5 days
 - E. 6 or more days
- 17. During the past 30 days, on how many days did you **not** go to school because you felt you would be unsafe at school or on your way to or from school?
 - A. 0 days
 - B. 1 day
 - C. 2 or 3 days
 - D. 4 or 5 days
 - E. 6 or more days

- 18. During the past 12 months, how many times has someone threatened or injured you with a weapon such as a gun, knife, or club **on school property?**
 - A. 0 times
 - B. 1 time
 - C. 2 or 3 times
 - D. 4 or 5 times
 - E. 6 or 7 times
 - F. 8 or 9 times
 - G. 10 or 11 times
 - H. 12 or more times
- 19. During the past 12 months, how many times has someone stolen or deliberately damaged your property such as your car, clothing, or books **on school property?**
 - A. 0 times
 - B. 1 time
 - C. 2 or 3 times
 - D. 4 or 5 times
 - E. 6 or 7 times
 - F. 8 or 9 times
 - G. 10 or 11 times
 - H. 12 or more times
- 20. During the past 12 months, how many times have you been harassed or bullied **on school property?**
 - A. 0 times
 - B. 1 time
 - C. 2 or 3 times
 - D. 4 or 5 times
 - E. 6 or 7 times
 - F. 8 or 9 times
 - G. 10 or 11 times
 - H. 12 or more times

- 21. During the past 12 months, how many times were you in a physical fight?
 - A. 0 times
 - B. 1 time
 - C. 2 or 3 times
 - D. 4 or 5 times
 - E. 6 or 7 times
 - F. 8 or 9 times
 - G. 10 or 11 times
 - H. 12 or more times
- 22. During the past 12 months, how many times were you in a physical fight **on school property?**
 - A. 0 times
 - B. 1 time
 - C. 2 or 3 times
 - D. 4 or 5 times
 - E. 6 or 7 times
 - F. 8 or 9 times
 - G. 10 or 11 times
 - H. 12 or more times
- 23. During the past 12 months, did your boyfriend or girlfriend ever hit, slap, or physically hurt you on purpose?
 - A. Yes
 - B. No
- 24. Have you ever been physically forced to have sexual intercourse when you did not want to?
 - A. Yes
 - B. No

The next 5 questions ask about sad feelings and attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide that is, taking some action to end their own life.

- 25. During the past 12 months, did you ever feel so sad or hopeless almost every day for **two weeks or more in** a **row** that you stopped doing some usual activities?
 - A. Yes
 - B. No
- 26. During the past 12 months, did you ever **seriously** consider attempting suicide?
 - A. Yes
 - B. No
- 27. During the past 12 months, did you make a plan about how you would attempt suicide?
 - A. Yes
 - B. No
- 28. During the past 12 months, how many times did you actually attempt suicide?
 - A. 0 times
 - B. 1 time
 - C. 2 or 3 times
 - D. 4 or 5 times
 - E. 6 or more times

- 29. **If you attempted suicide** during the past 12 months, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse?
 - A. **I did not attempt suicide** during the past 12 months
 - B. Yes
 - C. No

The next 8 questions ask about tobacco use.

- 30. Have you ever tried cigarette smoking, even one or two puffs?
 - A. Yes
 - B. No
- 31. How old were you when you smoked a whole cigarette for the first time?
 - A. I have never smoked a whole cigarette
 - B. 8 years old or younger
 - C. 9 or 10 years old
 - D. 11 or 12 years old
 - E. 13 or 14 years old
 - F. 15 or 16 years old
 - G. 17 years old or older
- 32. During the past 30 days, on how many days did you smoke cigarettes?
 - A. 0 days
 - B. 1 or 2 days
 - C. 3 to 5 days
 - D. 6 to 9 days
 - E. 10 to 19 days
 - F. 20 to 29 days
 - G. All 30 days

- 33. During the past 30 days, on the days you smoked, how many cigarettes did you smoke **per day**?
 - A. I did not smoke cigarettes during the past 30 days
 - B. Less than 1 cigarette per day
 - C. 1 cigarette per day
 - D. 2 to 5 cigarettes per day
 - E. 6 to 10 cigarettes per day
 - F. 11 to 20 cigarettes per day
 - G. More than 20 cigarettes per day
- 34. During the past 30 days, how did you **usually** get your own cigarettes? (Select only **one** response.)
 - A. I did not smoke cigarettes during the past 30 days
 - B. I bought them in a store such as a convenience store, supermarket, discount store, or gas station
 - C. I bought them from a vending machine
 - D. I gave someone else money to buy them for me
 - E. I borrowed (or bummed) them from someone else
 - F. A person 18 years old or older gave them to me
 - G. I took them from a store or family member
 - H. I got them some other way

- 35. During the past 30 days, on how many days did you smoke cigarettes **on school property**?
 - A. 0 days
 - B. 1 or 2 days
 - C. 3 to 5 days
 - D. 6 to 9 days
 - E. 10 to 19 days
 - F. 20 to 29 days
 - G. All 30 days
- 36. Have you ever smoked cigarettes daily, that is, at least one cigarette every day for 30 days?
 - A. Yes
 - B. No
- 37. During the past 12 months, did you ever try **to quit** smoking cigarettes?
 - A. I did not smoke during the past 12 months
 - B. Yes
 - C. No

The next 4 questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes.

- 38. How old were you when you had your first drink of alcohol other than a few sips?
 - A. I have never had a drink of alcohol other than a few sips
 - B. 8 years old or younger
 - C. 9 or 10 years old
 - D. 11 or 12 years old
 - E. 13 or 14 years old
 - F. 15 or 16 years old
 - G. 17 years old or older

- 39. During the past 30 days, on how many days did you have at least one drink of alcohol?
 - A. 0 days
 - B. 1 or 2 days
 - C. 3 to 5 days
 - D. 6 to 9 days
 - E. 10 to 19 days
 - F. 20 to 29 days
 - G. All 30 days
- 40. During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?
 - A. 0 days
 - B. 1 day
 - C. 2 days
 - D. 3 to 5 days
 - E. 6 to 9 days
 - F. 10 to 19 days
 - G. 20 or more days
- 41. During the past 30 days, on how many days did you have at least one drink of alcohol **on school property**?
 - A. 0 days
 - B. 1 or 2 days
 - C. 3 to 5 days
 - D. 6 to 9 days
 - E. 10 to 19 days
 - F. 20 to 29 days
 - G. All 30 days

The next 4 questions ask about marijuana use. Marijuana is also called grass or pot.

- 42. During your life, how many times have you used marijuana?
 - A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 to 39 times
 - F. 40 to 99 times
 - G. 100 or more times
- 43. How old were you when you tried marijuana for the first time?
 - A. I have never tried marijuana
 - B. 8 years old or younger
 - C. 9 or 10 years old
 - D. 11 or 12 years old
 - E. 13 or 14 years old
 - F. 15 or 16 years old
 - G. 17 years old or older
- 44. During the past 30 days, how many times did you use marijuana?
 - A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 to 39 times
 - F. 40 or more times
- 45. During the past 30 days, how many times did you use marijuana on school property?
 - A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 to 39 times
 - F. 40 or more times

The next 12 questions ask about other drugs.

- 46. During your life, how many times have you used **any** form of cocaine, including powder, crack, or freebase?
 - A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 to 39 times
 - F. 40 or more times
- 47. During the past 30 days, how many times did you use **any** form of cocaine, including powder, crack, or freebase?
 - A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 to 39 times
 - F. 40 or more times
- 48. During the past 30 days, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?
 - A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 to 39 times
 - F. 40 or more times

- 49. During your life, how many times have you used **heroin** (also called smack, junk, or China White)?
 - A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 to 39 times
 - F. 40 or more times
- 50. During your life, how many times have you used **methamphetamines** (also called speed, crystal, crank, or ice)?
 - A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 to 39 times
 - F. 40 or more times
- 51. During the past 30 days, how many times have you used **methamphetamines** (also called
 - speed, crystal, crank, or ice)?
 A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 to 39 times
 - F. 40 or more times
- 52. During your life, how many times have you used **ecstasy** (also called MDMA)?
 - A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 to 39 times
 - F. 40 or more times

- 53. During your life, how many times have you taken **steroid pills or shots** without a doctor's prescription?
 - A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 to 39 times
 - F. 40 or more times
- 54. During your life, how many times have you used a needle to inject any illegal drug into your body?
 - A. 0 times
 - B. 1 time
 - C. 2 or more times
- 55. During the past 12 months, has anyone offered, sold, or given you an illegal drug **on school property**?
 - A. Yes
 - B. No
- 56. During the past 30 days, how many times have you taken **over-the-counter drugs** to get high?
 - A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 to 39 times
 - F. 40 or more times

- 57. During the past 30 days, how many times have you taken a **prescription drug** such as Ritalin, Adoral, or Zanax without a doctor's prescription?
 - A. 0 times
 - B. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - E. 20 to 39 times
 - F. 40 or more times

The next 9 questions ask about sexual behavior.

- 58. Have you ever had sexual intercourse?
 - A. Yes
 - B. No
- 59. How old were you when you had sexual intercourse for the first time?
 - A. I have never had sexual intercourse
 - B. 11 years old or younger
 - C. 12 years old
 - D. 13 years old
 - E. 14 years old
 - F. 15 years old
 - G. 16 years old
 - H. 17 years old or older
- 60. The first time you had sexual intercourse, how old was your partner?
 - A. I have never had sexual intercourse
 - B. 5 or more years younger
 - C. 3 to 4 years younger
 - D. About the same age
 - E. 3 to 4 years older
 - F. 5 or more years older

- 61. During your life, with how many people have you had sexual intercourse?
 - A. I have never had sexual intercourse
 - B. 1 person
 - C. 2 people
 - D. 3 people
 - E. 4 people
 - F. 5 people
 - G. 6 or more people
- 62. During the past 3 months, with how many people did you have sexual intercourse?
 - A. I have never had sexual intercourse
 - B. I have had sexual intercourse, but not during the past 3 months
 - C. 1 person
 - D. 2 people
 - E. 3 people
 - F. 4 people
 - G. 5 people
 - H. 6 or more people
- 63. Did you drink alcohol or use drugs before you had sexual intercourse the **last time**?
 - A. I have never had sexual intercourse
 - B. Yes
 - C. No
- 64. The **last time** you had sexual intercourse, did you or your partner use a condom?
 - A. I have never had sexual intercourse
 - B. Yes
 - C. No

- 65. The **last time** you had sexual intercourse, what **one** method did you or your partner use to **prevent pregnancy**? (Select only **one** response.)
 - A. I have never had sexual intercourse
 - B. No method was used to prevent pregnancy
 - C. Birth control pills
 - D. Condoms
 - E. Depo-Provera (injectable birth control)
 - F. Withdrawal
 - G. Some other method
 - H. Not sure
- 66. How many times have you been pregnant or gotten someone pregnant?
 - A. 0 times
 - B. 1 time
 - C. 2 or more times
 - D. Not sure

The next 7 questions ask about body weight.

- 67. How do **you** describe your weight?
 - A. Very underweight
 - B. Slightly underweight
 - C. About the right weight
 - D. Slightly overweight
 - E. Very overweight
- 68. Which of the following are you trying to do about your weight?
 - A. **Lose** weight
 - B. **Gain** weight
 - C. **Stay** the same weight
 - D. I am **not trying to do anything** about my weight

- 69. During the past 30 days, did you **exercise** to lose weight or to keep from gaining weight?
 - A. Yes
 - B. No
- 70. During the past 30 days, did you eat less food, fewer calories, or foods low in fat to lose weight or to keep from gaining weight?
 - A. Yes
 - B. No
- 71. During the past 30 days, did you **go** without eating for 24 hours or more (also called fasting) to lose weight or to keep from gaining weight?
 - A. Yes
 - B. No
- 72. During the past 30 days, did you take any diet pills, powders, or liquids without a doctor's advice to lose weight or to keep from gaining weight? (Do not include meal replacement products such as Slim Fast.)
 - A. Yes
 - B. No
- 73. During the past 30 days, did you vomit or take laxatives to lose weight or to keep from gaining weight?
 - A. Yes
 - B. No

The next 11 questions ask about food you ate or drank during the past 7 days. Think about all the meals and snacks you had from the time you got up until you went to bed. Be sure to include food you ate at home, at school, at restaurants, or anywhere else.

- 74. During the past 7 days, how many times did you drink **100% fruit juices** such as orange juice, apple juice, or grape juice? (Do **not** count punch, Kool-Aid, sports drinks, or other fruit-flavored drinks.)
 - A. I did not drink 100% fruit juice during the past 7 days
 - B. 1 to 3 times during the past 7 days
 - C. 4 to 6 times during the past 7 days
 - D. 1 time per day
 - E. 2 times per day
 - F. 3 times per day
 - G. 4 or more times per day
- 75. During the past 7 days, how many times did you eat **fruit**? (Do **not** count fruit juice.)
 - A. I did not eat fruit during the past 7 days
 - B. 1 to 3 times during the past 7 days
 - C. 4 to 6 times during the past 7 days
 - D. 1 time per day
 - E. 2 times per day
 - F. 3 times per day
 - G. 4 or more times per day

- 76. During the past 7 days, how many times did you eat **green salad**?
 - A. I did not eat green salad during the past 7 days
 - B. 1 to 3 times during the past 7 days
 - C. 4 to 6 times during the past 7 days
 - D. 1 time per day
 - E. 2 times per day
 - F. 3 times per day
 - F. 4 or more times per day
- 77. During the past 7 days, how many times did you eat **potatoes**? (Do **not** count french fries, fried potatoes, or potato chips.)
 - A. I did not eat potatoes during the past 7 days
 - B. 1 to 3 times during the past 7 days
 - C. 4 to 6 times during the past 7 days
 - D. 1 time per day
 - E. 2 times per day
 - F. 3 times per day
 - G. 4 or more times per day
- 78. During the past 7 days, how many times did you eat **carrots**?
 - A. I did not eat carrots during the past 7 days
 - B. 1 to 3 times during the past 7
 - C. 4 to 6 times during the past 7 days
 - D. 1 time per day
 - E. 2 times per day
 - F. 3 times per day
 - G. 4 or more times per day

- 79. During the past 7 days, how many times did you eat **other vegetables**? (Do **not** count green salad, potatoes, or carrots.)
 - A. I did not eat other vegetables during the past 7 days
 - B. 1 to 3 times during the past 7 days
 - C. 4 to 6 times during the past 7 days
 - D. 1 time per day
 - E. 2 times per day
 - F. 3 times per day
 - G. 4 or more times per day
- 80. During the past 7 days, how many servings of **dairy products** did you eat or drink such as milk, yogurt, or cheese? (Include the milk you drank in a glass or cup, from a carton, or with cereal. Count the half pint of milk served at school as equal to one glass.)
 - A. I did not have any servings of dairy products during the past 7 days
 - B. 1 to 3 servings during the past 7 days
 - C. 4 to 6 servings during the past 7 days
 - D. 1 serving per day
 - E. 2 servings per day
 - F. 3 servings per day
 - G. 4 or more servings per day

- 81. During the past 7 days, how many times did you eat **baked goods** such as cookies, donuts, brownies, cakes, cinnamon rolls, or pie?
 - A. I did not eat any baked goods during the past 7 days
 - B. 1 to 3 times during the past 7 days
 - C. 4 to 6 times during the past 7 days
 - D. 1 time per day
 - E. 2 times per day
 - F. 3 times per day
 - G. 4 or more times per day
- 82. During the past 7 days, how many times did you drink **regular soda** (do not include diet soda)?
 - A. I did not drink regular soda during the past 7 days
 - B. 1 to 3 times during the past 7 days
 - C. 4 to 6 times during the past 7 days
 - D. 1 time per day
 - E. 2 times per day
 - F. 3 times per day
 - G. 4 or more times per day

- 83. During the past 7 days, how many times did you drink **non-carbonated sugared beverages** such as Gatorade, PowerAde, Fruitopia, Kool-Aid, or Sunny Delight?
 - A. I did not drink noncarbonated sugared beverages during the past 7 days
 - B. 1 to 3 times during the past 7 days
 - C. 4 to 6 times during the past 7 days
 - D. 1 time per day
 - E. 2 times per day
 - F. 3 times per day
 - G. 4 or more times per day
- 84. During the past 7 days, on how many days did you eat **breakfast**?
 - A. 0 days
 - B. 1 day
 - C. 2 days
 - D. 3 days
 - E. 4 days
 - F. 5 days
 - G. 6 days
 - H. 7 days

The next 2 questions ask about food preferences.

- 85. During an average school week (Monday Friday), how many times do you eat **fast food** such as Taco Bell, Wendy's, McDonald's, Sonic, or Panda Express? (Include fast food eaten before, during, and after school hours.)
 - A. I do not eat fast food during an average school week
 - B. 1 to 3 times during an average school week
 - C. 4 to 6 times during an average school week
 - D. 1 time per day
 - E. 2 times per day
 - F. 3 times per day
 - G. 4 or more times per day

The next 9 questions ask about physical activity.

- 86. On how many of the past 7 days did you exercise or participate in physical activity for at least 20 minutes that made you sweat and breathe hard, such as basketball, soccer, running, swimming laps, fast bicycling, fast dancing, or similar aerobic activities?
 - A. 0 days
 - B. 1 day
 - C. 2 days
 - D. 3 days
 - E. 4 days
 - F. 5 days
 - G. 6 days
 - H. 7 days

- 87. On how many of the past 7 days did you participate in physical activity for **at least 30 minutes** that did **not** make you sweat or breathe hard, such as fast walking, slow bicycling, skating, pushing a lawn mower, or mopping floors?
 - A. 0 days
 - B. 1 day
 - C. 2 days
 - D. 3 days
 - E. 4 days
 - F. 5 days
 - G. 6 days
 - H. 7 days
- 88. During the past 7 days, on how many days were you physically active for a total of **at least 60 minutes per day**? (Add up all the time you spend in any kind of physical activity that increases your heart rate and makes you breathe hard some of the time.)
 - A. 0 days
 - B. 1 day
 - C. 2 days
 - D. 3 days
 - E. 4 days
 - F. 5 days
 - G. 6 days
 - H. 7 days

- 89. On an average school day, how many hours do you play video or computer games or use a computer for something that is not school work? (Include activities such as Nintendo, Game Boy, Play Station, computer games, and the Internet.)
 - A. I do not play video or computer games or use a computer for something that is not school work
 - B. Less than 1 hour per day
 - C. 1 hour per day
 - D. 2 hours per day
 - E. 3 hours per day
 - F. 4 hours per day
 - G. 5 or more hours per day
- 90. On an average school day, how many hours do you watch TV?
 - A. I do not watch TV on an average school day
 - B. Less than 1 hour per day
 - C. 1 hour per day
 - D. 2 hours per day
 - E. 3 hours per day
 - F. 4 hours per day
 - G. 5 or more hours per day
- 91. In an average week when you are in school, on how many days do you go to physical education (PE) classes?
 - A. 0 days
 - B. 1 day
 - C. 2 days
 - D. 3 days
 - E. 4 days
 - F. 5 days

- 92. During an average physical education (PE) class, how many minutes do you spend actually exercising or playing sports?
 - A. I do not take PE
 - B. Less than 10 minutes
 - C. 10 to 20 minutes
 - D. 21 to 30 minutes
 - E. 31 to 40 minutes
 - F. 41 to 50 minutes
 - G. 51 to 60 minutes
 - H. More than 60 minutes
- 93. During the past 12 months, on how many sports teams did you play? (Include any teams run by your school or community groups.)
 - A. 0 teams
 - B. 1 team
 - C. 2 teams
 - D. 3 or more teams
- 94. During the past 30 days, did you see a doctor or nurse for an injury that happened while exercising or playing sports?
 - A. I did not exercise or play sports during the past 30 days
 - B. Yes
 - C. No

The next 5 questions ask about other health-related topics.

- 95. Have you ever been taught about AIDS or HIV infection in school?
 - A. Yes
 - B. No
 - C. Not sure
- 96. Has a doctor or nurse ever told you that you have asthma?
 - A. Yes
 - B. No
 - C. Not sure

- 97. During the past 12 months, have you had an episode of asthma or an asthma attack?
 - A. I do not have asthma
 - B. No, I have asthma, but I have not had an episode of asthma or an asthma attack during the past 12 months
 - C. Yes, I have had an episode of asthma or an asthma attack during the past 12 months.
 - D. Not sure
- 98. Has a doctor or nurse ever told you that you have diabetes?
 - A. Yes
 - B. No
 - C. Not sure
- 99. Are you on a special diet or exercise plan because of your diabetes?
 - A. No, I do not have diabetes
 - B. Yes, I am on a special diet only
 - C. Yes, I am on a special diet and a special exercise plan
 - D. Yes, I am on a special exercise plan only
 - E. I have diabetes, but I am not on a special diet or a special exercise plan

This is the end of the survey. Thank you very much for your help.

Appendix B: The 2005 Arizona Youth Risk Behavior Survey (YRBS) Highlights —Cochise§

The Youth Risk Behavior Survey measures the prevalence of specific personal behaviors that directly affect the health of our youth. The highlights are based on a sample of 854 high school students and the results are representative of all students in grades 9-12 in Cochise County.

Tobacco Use

- 64.3% Ever tried cigarettes
- 21.4% Smoked cigarette before 13 years old
- 25.0% Smoked during the past month
- 7.4% Smoked more than 10 cigarettes/day during the past month
- 14.5% Smoked daily during the past month
- 8.4% Smoked on 20 of the past 30 days
- 15.5% Got cigarettes in store during the past month
- 7.5% Smoked at school during the past month

Healthy Eating

- 17.8% Ate 5-A-Day during the past week²
- 22.5% Had 3 or more dairy products per day
- 21.0% Ate baked food daily
- 30.4% Drank regular soda daily
- 23.2% Had sugared beverages daily
- 31.7% Ate breakfast daily
- 10.5% Ate fast food daily

Physical Activity (P.A.)

- 33.0% Participated in insufficient physical activity¹ during the past week
- 9.2% No exercise
- 36.2% Active 60 minutes on five or more days during the past week
- 25.8% Attended PE class daily
- 56.7% Played on sports teams during past year
- 39.4% Watched 3 or more hours of TV per day
- 14.4% Played 3 or more hours of computer or video games

Overweight

- 14.8% At risk of becoming overweight
- 11.9% Overweight

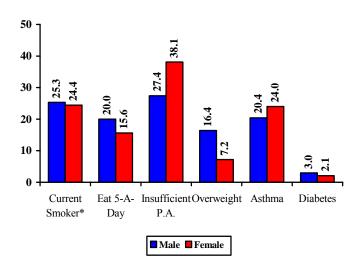
Health Status

- 11.4% Described health as fair or poor
- 22.3% Told asthma by a doctor or nurse
- 2.7% Told diabetes by a doctor or nurse

Prevention

- 50.7% Among smokers, tried to quit smoking
- 47.5% Trying to lose weight
- 61.0% Exercised to lose weight during the past month
- 39.7% Ate less to lose weight during the past
- 2.7% On a diet or exercise plan for diabetes

Percentage of Youth Risk Behaviors, by Gender, Cochise, 2005



Note:

¹ Had not participated in at least 20 minutes of vigorous physical activity on three or more of the past seven days and had not participated in at least 30 minutes of moderate physical activity on five or more of the past seven days.

² Ate five or more fruits/vegetables during the past week

^{*} Smoked during the past month

Scochise County YRBS data was made possible through funding from the Steps to A Healthier Arizona Initiative

Appendix C: The 2005 Arizona Youth Risk Behavior Survey (YRBS) Highlights — Arizona

The Youth Risk Behavior Survey measures the prevalence of specific personal behaviors that directly affect the health of our youth. The highlights are based on a sample of 3307 high school students and the results are representative of all students in grades 9-12 in Arizona.

Tobacco Use

- 58.2% Ever tried cigarettes
- 16.3% Smoked cigarette before 13
- 21.4% Smoked during the past month
- 10.1% Smoked more than 10 cigarettes/day during the past month
- 12.7% Smoked daily during the past month
- 7.5% Smoked on 20 of the past 30 days
- 11.4% Got cigarettes in store during the past month
- 4.7% Smoked at school during the past month

Healthy Eating

- 15.2% Ate 5-A-Day² during the past week
- 15.2% Had 3 or more dairy products per day
- 21.5% Ate baked food daily
- 29.9% Drank regular soda daily
- 20.0% Had sugared beverages daily
- 26.4% Ate breakfast daily
- 10.7% Ate fast food daily

Physical Activity (P.A.)

- 33.1% Participated in insufficient physical activity¹ during the past week
- 8.7% No exercise
- 32.3% Active 60 min on 5 or more days during the past week
- 26.2% Attended PE class daily
- 47.1% Played on sports teams during the past year
- 32.8% Watched 3 or more hours of TV per day
- 18.6% Played 3 or more hours of computer or video games

Overweight

- 11.9% At risk of becoming overweight
- 13.6% Overweight

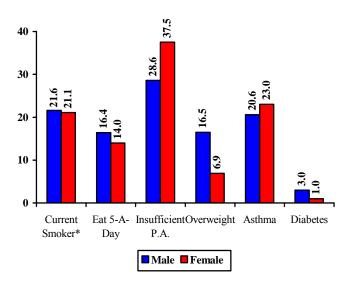
Health Status

- 10.7% Described health as fair or poor
- 21.8% Told asthma by a doctor or nurse
- 2.0% Told diabetes by a doctor or nurse

Prevention

- 51.1% Among smokers, tried to quit smoking
- 45.9% Trying to lose weight
- 60.7% Exercised to lose weight during the past month
- 39.3% Ate less to lose weight during the past month
- 2.5% On a diet or exercise plan for diabetes

Percentage of Youth Risk Behaviors, by Gender, Arizona, 2005



Note

¹ Had not participated in at least 20 minutes of vigorous physical activity on three or more of the past seven days and had not participated in at least 30 minutes of moderate physical activity on five or more of the past seven days.

² Ate five or more fruits/vegetables during the past week

^{*} Smoked during the past month